

REMARKS

Claims 10 – 24 remain in this application. Claims 10 and 24 have been amended. Reconsideration of this application in view of the amendments noted is respectfully requested.

Claims 10 and 24 have been amended to include the limitation that the biodegradable aliphatic polyester resin comprises an α - and/or β -hydroxycarboxylic acid unit. Support for this amendment can be found, for example, in the specification on page 5, lines 29 – 32.

The specification has been amended to correct errors in Table 2 on page 26 of the specification. The values of “MFI ratio (MI_E/MI_{PO})” in the columns of Example 12 and Example 13 are incorrect. The value of the MFI ratio for Example 12 was incorrectly shown as “14” and has been amended to read --1.4--. The value of the MFI ratio for Example 13 was incorrectly shown as “27” and has been amended to read --2.7--. These errors in Table 2 on page 26 of the specification can be easily found by calculating the ratios from values of MFI listed in the table on page 25 of the specification.

In the Office Action, the specification was objected to under 35 U.S.C. 112, first paragraph as failing to provide an adequate written description of the invention. For the same reasons set forth in the objection to the specification, claims 11 and 18 were rejected under 35 U.S.C. 112, first paragraph.

JIS K7105 is a Japanese Industrial Standard testing method published by the Japanese Standards Association and internationally available. JIS K7105 is entitled “Testing Methods for Optical Properties of Plastics.”

Per telephone conference with Examiner Pepitone on December 11, 2008, to overcome the objection/rejection applicant has included with this response the published English language translation of JIS K7105 and an IDS 1449 listing KIS K7105.

Therefore, applicant respectfully requests that the objection to the specification and rejection of claims 11 and 18 under Section 112, first paragraph be withdrawn.

Claims 10 – 15 and 17 – 22 were rejected under 35 U.S.C. 102(b) as being anticipated by Koleske et al. (U.S. Patent No. 3,734,979, hereinafter “Koleske”). Claim 24 was also

rejected under 35 U.S.C. 102(b) as being anticipated by Koleske. Applicant respectfully traverses these rejections.

With respect to independent claims 10 and 24, the presently claimed invention is patentably distinct from Koleske.

A biodegradable aliphatic polyester resin composition in accordance with the present invention is an aliphatic polyester resin comprising an α - and/or β -hydroxycarboxylic acid unit. As shown in the attached formulae (see "Attachment A"), examples of α -hydroxycarboxylic acids are glycolic acid (1) and lactic acid (2), and examples of β -hydroxycarboxylic acids are 3-hydroxybutyric acid (3), 3-hydroxyvaleric acid (4) and 3-hydroxycaproic acid (5), which are disclosed in the present specification.

Furthermore, α -hydroxycarboxylic acid is a carboxylic acid in which a hydroxyl group is bonded to a carbon atom adjacent a carboxylic carbon atom as a reference. A hydroxyl group bonded to the adjoining carbon atom is referred to as β -hydroxycarboxylic acid, sequentially followed by γ -hydroxycarboxylic acid, δ -hydroxycarboxylic acid, etc.

Moreover, the positional number of the carboxylic carbon atom is designated as 1, and when a hydroxyl group is bonded to a carbon atom whose positional number is 3, the carbon atom is also represented as 3-hydroxycarboxylic acid, which corresponds to β -hydroxycarboxylic acid.

The structure of Unit I (column 3) disclosed in Koleske is a cyclic ester polymer and is shown in formula (6) of Attachment A. Koleske discloses that $x=1$ to 4, $y=1$ to 4, $z=0$ or 1, and $x+y+z=4$ to 7 (column 3, lines 12 – 17). Consequently, when $z=0$, $x+y+z=4$, the carbon number is minimum, and R is H as described in column 3, line 13, the structure of Unit I is as shown in formula (7) of Attachment A. This corresponds to a δ -hydroxyvaleric acid unit.

This structure is not an α -hydroxycarboxylic acid unit or a β -hydroxycarboxylic acid unit as defined by present claims 10 and 24. Even when $x+y+z=5$, 6, or 7, the structure of Unit I of Koleske does not correspond to an α -hydroxycarboxylic acid unit or a β -hydroxycarboxylic acid unit.

Based upon the foregoing, the biodegradable aliphatic polyester resin composition according to the present invention as defined by claims 10 and 24 is patentably distinct in structure from the cyclic ester polymer disclosed by Koleske.

For these reasons, claims 10 and 24 are patentable over Koleske. Claims 11 – 15 and 17 – 22, depending directly or indirectly from claim 10, are also patentable over Koleske. Accordingly, applicant respectfully requests that the Section 102(b) rejection of claims 11 – 15, 17 – 22, and 24 as being anticipated by Koleske be withdrawn.

Claims 16 and 23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Koleske in view of Yamada et al. (WO 03/022927, hereinafter “Yamada”, with reference to U.S. Patent No. 7,173,080 as the English translation of WO 03/022927). Applicant respectfully traverses this rejection.

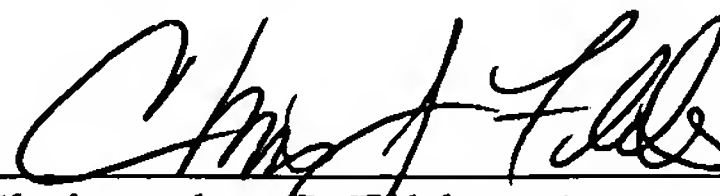
Applicant incorporates by reference the arguments made with respect to the patentability of claim 10 over Koleske. Based upon those arguments, claim 10 is patentable over Koleske. Claims 16 and 23, depending directly or indirectly from claim 10, are also patentable over Koleske, and any combination of Koleske with Yamada. Therefore, applicant respectfully requests that the Section 103(a) rejection of claims 16 and 23 as being unpatentable over Koleske in view of Yamada be withdrawn.

This amendment and request for reconsideration is felt to be fully responsive to the comments and suggestions of the examiner and to place this application in condition for allowance. Favorable action is requested.

Respectfully submitted,

Kazue Ueda et al.

Fildes & Outland, P.C.



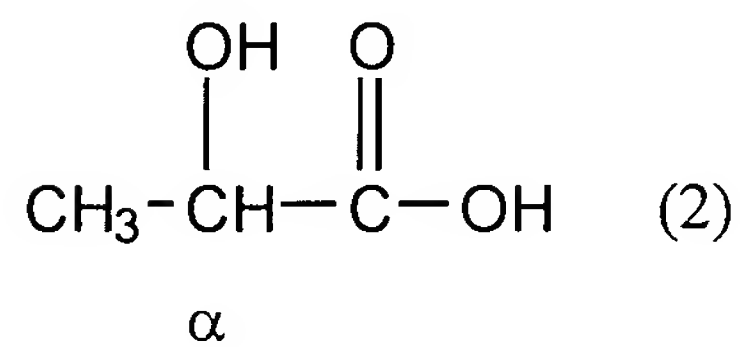
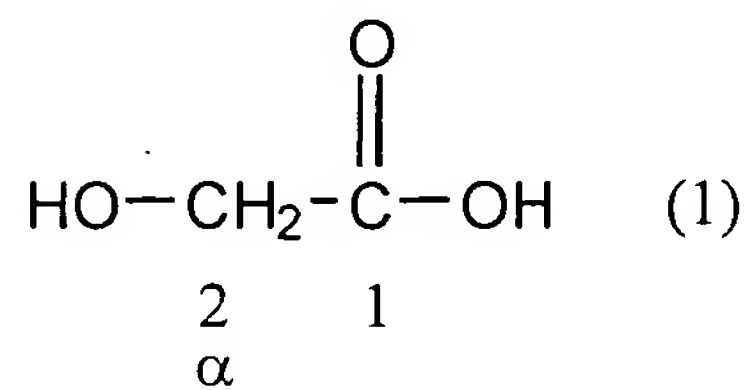
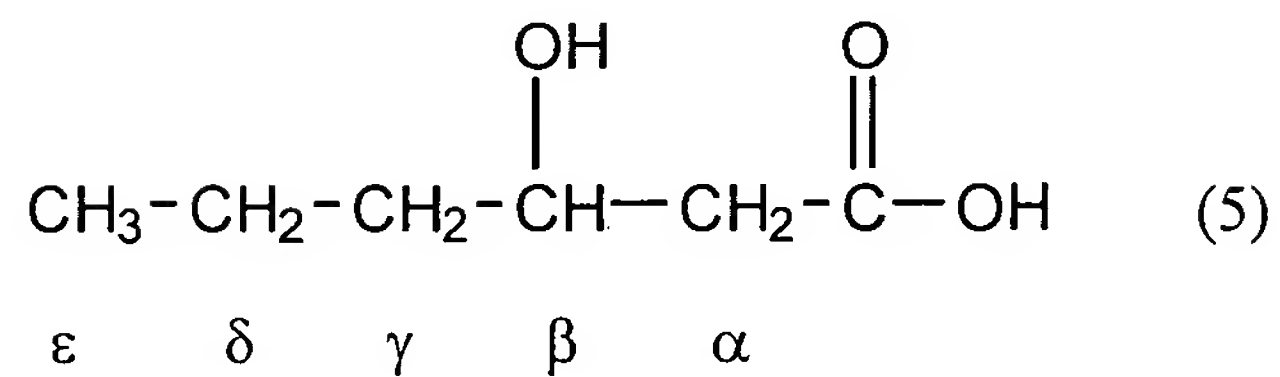
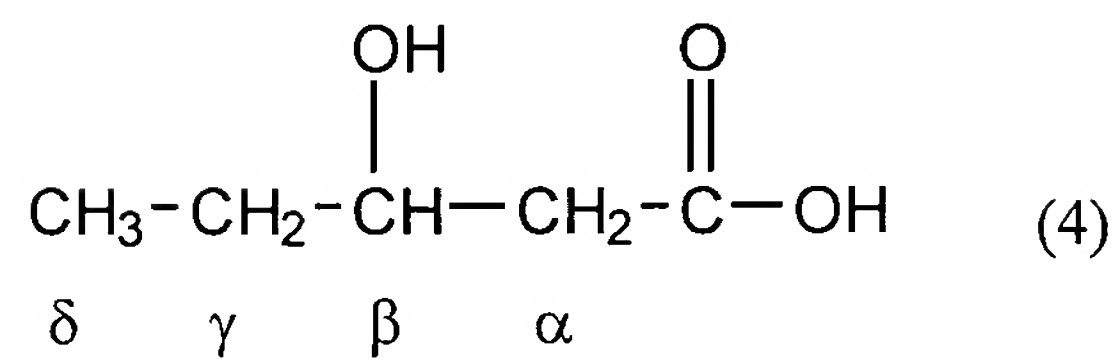
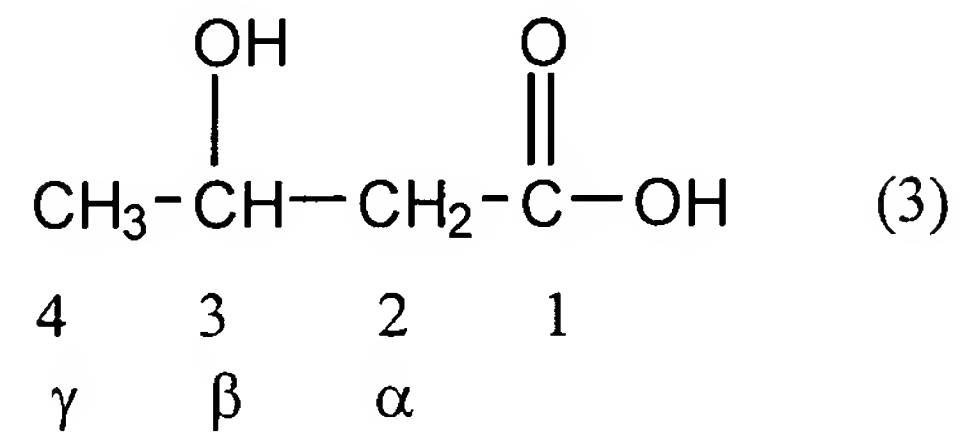
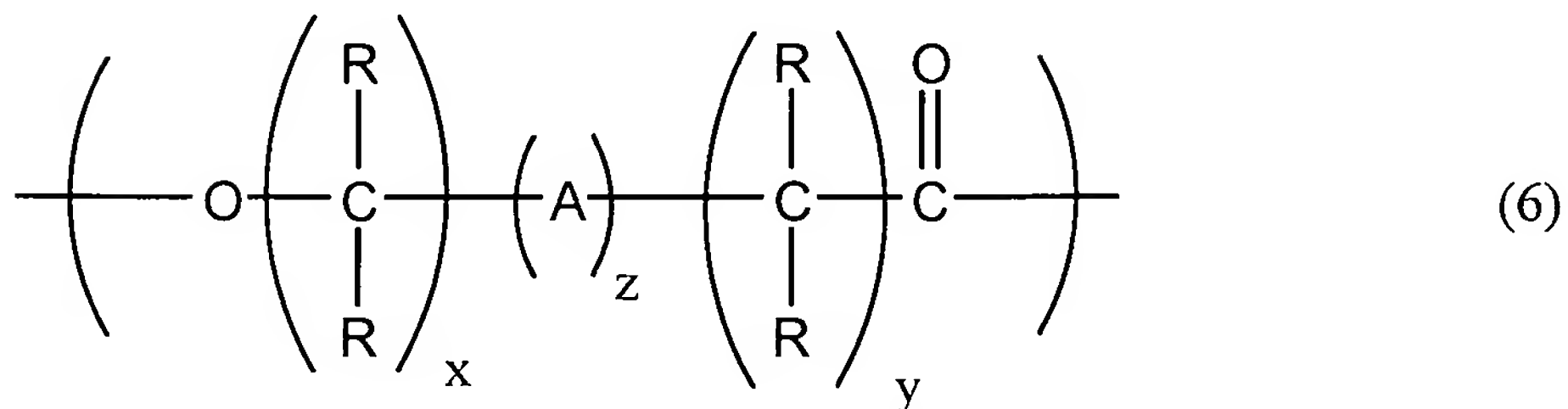
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α -hydroxycarboxylic acid β -hydroxycarboxylic acidcyclic ester polymer Units I

$$x+y+z=4, z=0, \text{R}=\text{H}$$

